CLAIMS

1. Production process for a board, based on hydraulic binder (9b,11), with thinned edges (10), in which:

1) a composition of hydraulic binder (2) is poured onto a facing material (1),

2) the coated material obtained is passed into a die (4, 403) so as to obtain a preform (5),

3) the hydraulic setting of the composition of hydraulic binder (2) is allowed to take place, and

4) the preform (5) is cut,

this process being characterized in that

a) it also comprises the following steps:

- before step 2), a lath (6, 23) is extracted from a lath magazine (20), the length of which lath is less than, approximately equal to or greater than the width of the facing material (1) and this lath (6, 23) is introduced under the said facing material (1);

- after step 3), the said lath (6, 23) is withdrawn;

and in that

b) the cutting of step 4) is carried out at the narrowed section (8) created by the lath (6, 23).

2. Process according to claim 1, in which the introduction of the lath (6, 23) is realized upstream from the pouring zone of the composition of hydraulic binder (2).

3. Process according to claim 1, in which the introduction of the lath (6, 23) is realized in or downstream from the pouring zone of the composition of hydraulic binder (2) and before the passage of the said coated facing material (1) into the die (4, 403).

4. Process according to claim 1, 2 or 3, further comprising a step of coating of a part at least of the upper face (401) of the lath (6, 23) by means of a glue.

5. Process according to one of claims 1 to 4, further comprising a step of acceleration of the lath (6, 23) up to a speed approximately equal to that of the facing material.

6. Process according to one of claims 1 to 5, also comprising a step of accompanying the lath (6, 23) during the passage into the die.

7. Process according to one of claims 1 to 6, characterized in that the cutting of step 4) takes place after the withdrawal of the lath (6, 23).

8. Process according to one of claims 1 to 7, characterized in that the cutting of the board based on hydraulic binder is carried out approximately in the middle of the narrowed section (8).

9. Process according to one of claims 1 to 8, characterized in that the said lath (6, 23) has a thickness ranging from 0.5 to 4 mm, preferably from 1.5 to 4 mm.

10. Process according to one of claims 1 to 9, characterized in that the said lath (6, 23) has a width of between 5 and 20 cm.

11. Process according to one of claims 1 to 10, characterized in that the conveyor belt (7) supports two lateral strips on each of its longitudinal sides.

12. Process according to one of claims 1 to 11, characterized in that it also comprises, between step 1) and step 2), a step of covering the composition of hydraulic binder (2) by means of a second facing material (3).

13. Process according to one of claims 1 to 12, characterized in that the hydraulic binder comprises plaster.

14. Production line for boards based on hydraulic binder (9b,11), having thinned edges (10), from a preform (5) comprising at least a facing material (1) covered with a composition of hydraulic binder (2), this production line comprising a die (4, 403) as well as, upstream from this die (4, 403), means (20-22, 24-39) for introducing, under the facing material (1), a lath (6, 23) the length of which is approximately at least equal to the width of the facing material (1).

15. Production line for boards of hydraulic binder (9b, 11) according to claim 14, characterized in that the means (20-22, 24-39) are situated upstream from the pouring zone of the composition of hydraulic binder (2).

16. Production line for boards of hydraulic binder (9b,11) according to claim 14, characterized in that the means (20-22, 24-39) are situated in or downstream from the pouring zone of the composition of hydraulic binder (2).

17. Production line for boards based on hydraulic binder (9b,11) according to claim 14, 15 or 16, also comprising means (402) for coating with glue at least a part of the upper face (401) of the lath (6, 23).

18. Production line for boards based on hydraulic binder (9b,11) according to one of claims 14 to 17, also comprising means (405, 406) of acceleration of the lath (6, 23) up to a speed approximately equal to that of the facing material.

19. Production line for boards based on hydraulic binder (9b,11) according to one of claims 14 to 18, also

comprising means (405, 406) of accompanying the lath (6, 23) during passage into the die (4, 403).

20. Production line for boards of hydraulic binder (9b,11) according to one of claims 14 to 19, comprising:

- a lath magazine (20),
- at least one lath (6, 23);
- means (26) for extracting one lath (6, 23) at a time from the lath magazine (20);
- means (27, 28, 29) for receiving the extracted lath (6, 23) ;
- means (31) for displacing the extracted lath (6, 23) in a direction parallel to its length;
- means (32, 33, 34, 35) for supporting the displaced lath (6, 23); and
- means (37) for sliding the lath (6, 23) under the facing material (1).

21. Production line for boards based on hydraulic binder (9b,11) according to claim 20, in which:

- the means (27, 28, 29) for receiving the extracted lath (6, 23) include an inclined surface (28) fitted in its lower part with a rim (29);
- the means (32, 33, 34, 35) for supporting the displaced lath (6, 23) in an inclined position include an inclined surface (33) fitted in its lower part with a rim (34) and on one side with a stop (35).

22. Production line for boards based on hydraulic binder (9b,11) according to claim 21, in which:

- the longitudinal axis of the rim (34) is perpendicular to the longitudinal axis of the conveyor belt (7);
- the means (32, 33, 34, 35) for supporting the displaced lath (6, 23) are situated facing the start of the board (403); and the inclined surface (33) is adjacent to the board (403).

23. Production line for boards of hydraulic binder (9b,11) according to one of claims 14 to 19, comprising:

- a lath magazine (20),
- at least one lath (6, 23);
- means (26) for extracting one lath (6, 23) at a time from the lath magazine (20);
- means (32, 33, 34, 35) for supporting the lath (6, 23); and
- means (405, 406) for accelerating the lath (6, 23) up to approximately the speed of the facing material and means (405, 406) for accompanying the lath (6, 23) during its passage into the die (4, 403).

24. Production line for boards based on hydraulic binder (9b,11) according to claim 23, in which the means (405,406) include fingers (405a, 405b) arranged on a motorized belt (406).

25. Production line for boards based on hydraulic binder (9b,11) according to claim 23 or 24, in which the means (32, 33, 34, 35) include an inclinable surface (33), preferably fitted in its lower part with a rim (34), the said inclinable surface being able to occupy an inclined position and an approximately horizontal position.

26. Production line for boards based on hydraulic binder (9b,11) according to one of claims 14 to 25, characterized in that it also comprises means of covering the composition of hydraulic binder (2) by means of a second facing material (3).

27. Production line for boards based on hydraulic binder (9b,11) according to one of claims 14 to 26, characterized in that the hydraulic binder comprises plaster.

28. Device for the introduction of laths (6, 23) onto a facing material (1), comprising:

- a lath magazine (20);
- at least one lath (6, 23) ,
- means (26) for extracting one lath (6, 23) at a time from the laths magazine (20);
- means (27, 28, 29) for receiving the extracted lath (6, 23);
- means (31) for displacing the extracted lath (6, 23) in a direction parallel to its length;
- means (32, 33, 34, 35) for supporting the displaced lath; and
- means (37) for moving the displaced lath (6, 23) in a direction parallel to its width;

characterized in that it also comprises means (402) for coating with glue at least a part of the upper face (401) of a lath (6, 23).

29. Device according to claim 28, characterized in that:

- the means (27, 28, 29) for receiving the extracted lath (6, 23) include an inclined surface (28) fitted in its lower part with a rim (29);
- the means (32, 33, 34, 35) for supporting the displaced lath (6, 23) in an inclined position include an inclined surface (33) fitted in its lower part with a rim (34) and on one side with a stop (35).

30. Device for the introduction of laths (6, 23) onto a facing material (1), comprising:

- a lath magazine (20),
- at least one lath (6, 23);
- means (26) for extracting one lath (6, 23) at a time from the lath magazine (20);
- means (32, 33, 34, 35) for supporting the lath (6, 23); and

- means (405, 406) for accelerating the lath (6, 23) up to approximately the speed of the facing material and means (405, 406) for accompanying the lath (6, 23) during its passage into the die (4, 403).

31. Device according to claim 30, in which the means (405, 406) include fingers (405a, 405b) arranged on a motorized belt (406).

32. Device according to claim 30 or 31, in which the means (32, 33, 34, 35) include an inclinable surface (33), preferably fitted in its lower part with a rim (34), said inclinable surface being able to occupy an inclined position and an approximately horizontal position.